15 November 1957, Volume 126, Number 3281

SCIENCE

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SCIENCE, founded in 1880, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of 3 March 1879. SCIENCE is indexed in the Reader's Guide to Periodical Literature and in the Industrial Arts Index.

Editorial and personnel-placement correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts, book reviews, and illustrations, see *Science* 125, 16 (4 Jan. 1957).

Display-advertising correspondence should be addressed to SCIENCE, Room 740, 11 West 42 St., New York 36, N.Y.

Change of address notification should be sent to 1515 Massachusetts Ave., NW, Washington 5, D.C., 4 weeks in advance. If possible, furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including zone numbers, if any.

Annual subscriptions: \$7.50; foreign postage, \$1; Canadian postage, 50¢. Single copies, 25¢. Special rates to members of the AAAS. Cable address: Advancesci, Washington.

Rates effective 1 January 1958: \$8.50; foreign postage, \$1.50; Canadian postage, 75¢. Single copies, 35¢.



The Long Pull

The launching of the sputniks in October and November brought to a much wider public the realization that the Soviet Union has attained a high level of scientific and engineering competence. Neither the existence of this competence nor the methods by which it has been attained is news to those American scientists who have visited the Soviet Union in recent years or to those who have followed the Soviet scientific literature. The methods are simple and straightforward: education in the sciences and mathematics in the schools and universities is intense and prolonged; all who show talent in the sciences have an opportunity to go into more advanced work; those who attain professional standing are handsomely rewarded both in material benefits and status in the community; research, both basic and applied, is strongly supported.

The challenge to this country cannot be met, except perhaps on a shortterm basis, by crash programs in particular enterprises or by shifting scientists and engineers from one project to another. What is needed to prevent us from slipping into a secondary position in science and technology over the long pull of the next ten to twenty years is a thorough reform of our educational system from grade school through college and a means of assuring that talented students are not barred from higher education for reasons of race, religion, or financial resources.

Reform, if it is to come, will require, among other things, radical changes in the public attitude toward intellectual accomplishment and a willingness to provide adequate pay and status for teachers. Certainly, such reform should be our long-term goal, but a more immediate gain can be effected by making an effort to remove the financial barrier that now bars some 100,000 well-qualified high school graduates from further education each year. The costs of education have been steadily rising, and some of the increased costs have been passed on to students even in the state universities. Many of the state universities were originally tuition-free on the assumption that society was the beneficiary of education and that a democratic society should not put financial barriers in the way of its economically less favored families. The trend away from free tuition is based on the premise that students benefit from higher education and that they will appreciate education more if they pay for it.

The President's Committee on Education Beyond the High School (Second Report to the President) has, in the main, favored the last set of assumptions. It recommends that the needs of students for financial support be met by private, local, and state scholarships, by federally supported "work-study" programs, by credits on income tax for educational expenditures, and by the provision of privately financed loans at low rates of interest to students or parents.

All of these measures are good as far as they go, but is the committee wise in rejecting for the present a Federal scholarship program? The committee notes the recent expansion of scholarship support by industry, labor unions, and state and local governments. It adds, "If these programs should later prove to be inadequate, the Committee believes a Federal scholarship program to fill the gap is inevitable." But recent events have put a premium on time. Can we afford to lose tens of thousands of talented people from higher education each year while we wait to see whether or not private sources can foot the bill?—G. DuS.